Tennessee

Science and Engineering Profile

Characteristic	State	U.S.	Rank	Characteristic	State	U.S.	Rank
Doctoral scientists, 1999[1]	7,470	518,670	23	Total R&D performance, 1998 (millions)	$2,503	$214,668	22
Doctoral engineers, 1999[1]	1,750	107,100	19	Industry R&D, 1998 (millions)	$2,040	$163,480	19
S&E doctorates awarded, 1999[1]	360	25,953	24	Academic R&D, 1998 (millions)	$340	$25,342	26
of which, in life sciences	33%	25%		of which, in life sciences	64%	57%	
in psychology	23%	14%		in engineering	14%	16%	
in engineering	19%	21%		in physical sciences	8%	9%	
S&E postdoctorates, 1998[1]				Public higher education current-fund			
in doctorate-granting institutions	576	39,494	19	expenditures, 1997 (millions)	$2,128	$125,236	20
S&E graduate students, 1998[1]				Number of SBIR awards, 1990-98	341	35,413	24
in doctorate-granting institutions	6,764	422,834	20	Patents issued to state residents, 1999	855	83,901	25
Population, 1999 (thousands)	5,484	276,580	16	Gross state product, 1998 (billions)	$160	$8,800	19
Civilian labor force, 1999 (thousands)	2,819	140,536	18	of which, agriculture	1%	1%	
				manufacturing, mining, construction	25%	22%	
Personal income per capita, 1999	$25,574	$28,542	35	transportation, communication, utilities	8%	9%	
				wholesale and retail trade	19%	16%	
Federal spending				finance, insurance, real estate	15%	19%	
Total expenditures, 1999 (millions)	$30,867	$1,508,933	17	services	21%	21%	
R&D obligations, 1998 (millions)	$621	$70,445	24	government	11%	12%	

NOTE: Rankings and totals are based on data for the 50 States, District of Columbia, and Puerto Rico. Reliability of the estimates of industry R&D and of doctoral scientists and engineers varies by State, because the sample allocation was not based on geography. The rankings do not take into account the margin of error of estimates from sample surveys.

[1]Data on graduate students, doctoral scientists and engineers, and postdoctorates include all graduate degree (except M.D.) candidates and recipients in S&E fields, including health fields. Data on S&E doctorates awarded do not include health fields.

Federal Obligations for Research and Development by Agency and Performer: Fiscal Year 1998

Agency	Performer							
	Total	Federal Intramural	All FFRDCs	Industrial firms	Universities & colleges	Other nonprofits	State & local government	State rank, total
	[In thousands of dollars]							
Total, all agencies	621,155	37,925	317,437	54,239	181,024	27,685	2,845	24
Department of Agriculture	8,712	1	0	0	8,711	0	0	39
Department of Commerce	1,598	886	0	0	187	525	0	36
Department of Defense	64,824	22,024	15,642	18,877	8,279	2	0	29
Department of Energy	319,786	1,604	296,496	13,459	8,078	149	0	6
Dept. of Health & Human Services	168,671	1,812	281	3,984	135,644	26,950	0	19
Department of the Interior	6,193	5,154	0	12	994	0	33	32
Department of Transportation	4,382	282	1,390	196	0	0	2,514	23
Environmental Protection Agency	1,467	0	0	149	1,318	0	0	35
National Aeronautics and Space Admin	29,971	5,957	3,628	16,653	3,435	0	298	21
National Science Foundation	15,551	205	0	909	14,378	59	0	29
State rank, total	24	37	4	33	23	16	32	na

NOTE: Federal R&D obligations are as reported by funding agencies. Ranks and totals are based on data for the 50 States, District of Columbia, and Puerto Rico.

KEY: FFRDC = federally funded research and development center; SBIR = small business innovation research; na = not applicable.

SOURCES: Prepared by the National Science Foundation/Division of Science Resources Studies. Data compiled from numerous sources -- see the section, "Data Sources for Science and Engineering (S&E) State Profiles".